

REMARKS

Present Status of Application

The Examiner is thanked for the thorough examination of the present application. The Office Action, however, has tentatively rejected all claims. Specifically, the Office Action has rejected claims 1-8 and 12-26 under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent 6,253,248 to Nakai (hereafter Nakai). The Office Action has also tentatively rejected claims 9-11 and 27-29 under 35 U.S.C. §103(a) as allegedly obvious over a selective combination of elements from Nakai and U.S. Patent 5,706,507 to Schloss (hereafter Schloss). For at least the reasons set forth below, Applicant submits that the rejections should be withdrawn.

Independent Claim 1

The Office Action rejected independent claim 1 under 35 U.S.C. § 102(b) as allegedly anticipated by Nakai. For at least the reasons set forth below, Applicant respectfully traverses these rejections.

Claim 1 recites:

1. A computer system comprising:
 - one or more client computers connected to a global-area computer network;
 - a transport gateway computer connected to the global-area computer network;
 - a plurality of server computers connected to the transport gateway;
 - and
 - a transport gateway computer program executable by the transport gateway, the transport gateway computer program comprising computer instructions for:
 - receiving a file transfer request from a client computer;
 - selecting a repository on one of the server computers based on one or more routing tokens in the file transfer request, wherein the routing tokens include one or more attributes describing the file, the client computer or an originator of the file transfer request;* and
 - performing the requested file transfer.

(Emphasis added.) Applicant respectfully submits that the rejection is misplaced for at least the reason that the cited art does not disclose the features emphasized above.

Specifically, among other features, claim 1 defines “selecting a repository on one of the server computers based on one or more routing tokens in the file transfer request, wherein the routing tokens include one or more attributes describing the file, the client computer or an originator of the file transfer request.” The Office Action (paragraph No. 5) has alleged that this feature is taught in Nakai in col. 3-line 53 through col. 4, line 14, col. 5, lines 35-42, and col 7 line 37 – col. 8, line 9. Applicant respectfully disagrees. In contrast, this portion of Nakai actually states:

The operation of the proxy server in FIG. 1 will be briefly described below. When the transmitter/receiver 101 has received a request from the client 107, the request is passed to the request interpreting/executing unit 102. The request interpreting/executing unit 102 checks a protocol that the server as the destination of the request supports, and executes protocol conversion if necessary.

In this case, information contained in the request from the client alone is often insufficient to execute conversion to the protocol that the destination server supports. In such case, information or the like on the user context holding unit 104 or local disk 108 is read out, or the setup window controller 106 presents the setup window on a display of the client 107 to request the user to input necessary information, thus acquiring the information required for protocol conversion.

The request interpreting/executing unit 102 inquires the server as to whether it has capability (resources) of satisfying the request or its resource state before it directly issues the request from the client to that server, and determines a server or system that can satisfy the request from the client most satisfactorily.

In this way, the request interpreting/executing unit 102 issues a request after it specifies the necessary information and actual request destination, and then receives information sent back therefrom. Also, the request interpreting/executing unit 102 adds another information to the information sent back from the request destination, and sends them to the transmitter/receiver 101, which then sends back the data to the client 107.

...

The proxy server 100 receives a request from the client 107 by the transmitter/receiver 101 in step S301. The request interpreting/executing unit 102 forms data to be sent back to the Web browser on the basis of the received request (the respective processing operations in steps S302 to S304 and S306 to S309), and the transmitter/receiver 101 sends back the formed data to the Web browser (the processing in steps S305 and S310).

...

In step S500, the proxy server 100 checks using a file list get command if a file or directory named "/abc/def" is present in the CM server. According to the reply value of this command, it is determined that the above name indicates one of:

- a) a directory on the server;
- b) a file on the server, which is not checked out for modification;
- c) a file on the server, which is checked out for modification; and
- d) not present on the server.

Subsequently, the flow advances to one of the following steps according to the determination result in the branch processing of steps S501, S502, and S504:

step S503 (if the determination result is "a")

step S505 (if the determination result is "b")

step S506 (if the determination result is "c")

step S507 (if the determination result is "d")

The processing in step S503 will be explained below assuming that "/abc/def" is a directory name on the server.

In step S503, a list of file directory names present under the directory "/abc/def" on the CM server is acquired using a file list get command. Postulate that this command indicates there are three following files under the directory:

xxx.html yyy.html zzz.html

Then, the proxy server forms a text file described in the HTML language, as shown in FIG. 6. FIG. 6 shows an example of file list data formed by the proxy server in the first embodiment. The HTML language is the abbreviation for Hypertext Markup Language, is popularly used for displaying messages on the Web browser and the like, and is described in detail in references such as RFC-1866.

After that, the flow returns to the processing in step S310 in FIG. 3, and the contents of the text file shown in FIG. 6 are sent back to the Web browser by the transmitter/receiver 101. Upon reception of the text file, the contents shown in FIG. 7 are displayed on the message display window of the Web browser. FIG. 7 shows the state wherein the Web browser displays the text file shown in FIG. 6.

As can be verified from even a cursory review of this portion of Nakai, there is no teaching of the claimed feature, which is emphasized above.

More specifically, claim 1 defines a system for file transfer between geographically and organizationally distant end points (a "customer repository" aka "client computer" at one end, and a set of "supplier repositories" aka "server computers" at the other end). This system utilizes as many common off-the-shelf components as possible, as is noted in many places in the specification of the present application (*see e.g.*, paragraphs 0067-0071).

One unique component in the embodiments of the present application is what has been called the "transport gateway," and in particular its routing capability. The transport gateway resides between the client and the plurality of repository servers; when the client performs file transfer with a repository server of some kind, it connects to the gateway, not the repository server directly; rather, the gateway picks the right repository server (using the routing capability) and connects to it on the client's behalf.

By this routing capability, the client does not have to know what repository server to connect, nor tell the transport gateway what repository server to connect. Instead, the client tells the gateway (by means of routing tokens included by the client in its request) some attribute(s) about the client context that the gateway will understand, and the gateway maps from those attribute(s) into the precise repository server that is appropriate for that context. For example, the client might provide routing tokens in its request describing the user itself: the type of organization (private business, government agency, etc), the type of business relationship the user has with the supplier of the gateway and repository server (support customer, vendor, etc), the scale of organization (small/home office, mid-size, enterprise, etc), the location of the user (*e.g.* country), etc.. As another example, the client might provide routing tokens in its request describing the file being transferred: the nature of its content (hardware diagnostic report, software inventory report, executable software, purchase order, etc), the name of the application that produced it or for which it is intended, etc. In each case, these routing tokens "describe" the context of the particular client request. The gateway then chooses the right repository server that the supplier has designated as appropriate for handling file transfers for that context. This component (which component is more fully explained in the specification), among others, clearly defines claim 1 over the cited because it abstracts the repository servers to the client. Therefore, when repository servers change - which realistically happens all the time in a large supplier organization - the gateway's routing

capability shelters the customer from that change. The customer merely continues to describe his request context in the same way, and the supplier merely changes the routing rules to adapt to the change in the repository server pool accordingly. This solves one of the major potential breakage points in any large-scale long-term data-exchange architecture (e.g., shifts in topology).

In contrast to the features of claim 1, the teachings of Nakai are quite different. In this regard, and in contrast to the system of the present application, the system of Nakai is directed simply to an “information processing apparatus,” in which a proxy server, disposed between the client and server, intervenes in communications between the client and server. In this regard, the proxy server specifies (using the precise IP address or server name of the end server, as specified by the client) a server based on the request, and determines the communication protocol to be used in the communication. (*see* Nakai, col. 5, line 47, which shows their client requests all specify the exact end-server machine name – or IP address). This is also suggested from all of the examples discussed in the Nakai spec – e.g., col. 5 lines 13-15, col. 5 lines 51-65, col. 6 lines 55-65, etc.

The foregoing description has been provided merely to assist the Examiner’s in understanding of an operation embodiment of claim 1. For purposes of defining claim 1 over the cited Nakai reference, suffice it to say that Nakai fails to disclose the “selecting a repository ... based on one or more routing tokens...” element of this claim, and for at least this reason the rejection should be withdrawn.

Dependent Claims 2-11

Claims 2-11 each depend from claim 1, and therefore patently define over the applied art for at least the same reasons described above.

Independent Claim 12

The Office Action rejected independent claim 12 under 35 U.S.C. § 102(b) as allegedly anticipated by Nakai. For at least the reasons set forth below, Applicant respectfully traverses these rejections.

Claim 12 recites:

12. A method of transferring file information between one or more client computers and one or more server computers over a global-area computer network, the method comprising:
receiving a file transfer request from a client computer;
selecting a repository on one of the server computers based on one or more routing tokens in the file transfer request, wherein the routing tokens include one or more attributes describing the file, the client computer or an originator of the file transfer request; and
performing the requested file transfer.

(Emphasis added.) Applicant respectfully submits that the rejection is misplaced for at least the reason that the cited art does not disclose the features emphasized above.

The features emphasized above closely parallel the distinguishing features of claim 1, which have been fully described above. Applicant, accordingly, submits that claim 12 patently defines over the cited art for at least the same reasons described above in connection with claim 1. Therefore, Applicant submits that the rejection of claim 12 be withdrawn.

Dependent Claims 13-18

Claims 13-18 each depend from claim 12, and therefore patently define over the applied art for at least the same reasons described above.

Independent Claim 19

The Office Action rejected independent claim 19 under 35 U.S.C. § 102(b) as allegedly anticipated by Nakai. For at least the reasons set forth below, Applicant respectfully traverses these rejections.

Claim 19 recites:

19. A computer-readable storage medium comprising a routing computer program executable by a transport gateway connected to one or more client computers and one or more server computers, the transport gateway computer program comprising computer instructions for:
receiving a file transfer request from a client computer;
selecting a repository on one of the server computers based on one or more routing tokens in the file transfer request, wherein the routing tokens include one or more attributes describing the file, the client computer or an originator of the file transfer request; and
performing the requested file transfer.

(Emphasis added.) Applicant respectfully submits that the rejection is misplaced for at least the reason that the cited art does not disclose the features emphasized above.

The features emphasized are identical to the features emphasized in independent claim 12, above closely parallel the distinguishing features of claim 1, which have been fully described above. Applicant, accordingly, submits that claim 12 patentably defines over the cited art for at least the same reasons as claim 12. Therefore, Applicant submits that the rejection of claim 19 be withdrawn.

Dependent Claims 20--29

Claims 20-29 each depend from claim 19, and therefore patentably define over the applied art for at least the same reasons described above.

Independent Bases of Patentability of Claims 9-11 and 27-29

In addition to the fact that claims 9-11 and 27-29 depend from claims 1 and 19 (respectively), and therefore patentably define over the cited art for at least the same reasons set forth in connection with claims 1 and 19 above, Applicant further traverses the rejection of claims 9-11 and 27-29 as improper.

The Office Action rejected claims 9-11 and 27-29 as allegedly obvious over the combination of Nakai and Schloss. In forming this rejection, the Office Action merely

concluded that the combination of these two references would have been obvious “because it offers the advantage of allowing the fetching of information by any authorized user ... from any cooperating computer on the Internet by simply clicking on a link.” (Office Action, paragraph No. 14). Applicants respectfully submit that this rejection falls far short of the legal requirements for forming rejections under 35 U.S.C. § 103(a). In this regard, it is well-settled law that in order to properly support an obviousness rejection under 35 U.S.C. § 103, there must have been some teaching in the prior art to suggest to one skilled in the art that the claimed invention would have been obvious. W. L. Gore & Associates, Inc. v. Garlock Thomas, Inc., 721 F.2d 1540, 1551 (Fed. Cir. 1983). More significantly,

“The consistent criteria for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that this [invention] should be carried out and would have a reasonable likelihood of success, viewed in light of the prior art. ...” Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure... In determining whether such a suggestion can fairly be gleaned from the prior art, the full field of the invention must be considered; for the person of ordinary skill in the art is charged with knowledge of the entire body of technological literature, including that which might lead away from the claimed invention.”

(Emphasis added) In re Dow Chemical Company, 837 F.2d 469, 473 (Fed. Cir. 1988).

In this regard, Applicants note that there must not only be a suggestion to combine the functional or operational aspects of the combined references, but that the Federal Circuit also requires the prior art to suggest both the combination of elements and the structure resulting from the combination. Stiftung v. Renishaw PLC, 945 Fed.2d 1173 (Fed. Cir. 1991).

Therefore, in order to sustain an obviousness rejection based upon a combination of any two or more prior art references, the prior art must properly suggest the desirability of combining the particular elements to create a message passing system as defined by the pending claims.

When an obviousness determination is based on multiple prior art references, there must be a showing of some “teaching, suggestion, or reason” to combine the references.

Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1579, 42 USPQ2d 1378,

1383 (Fed. Cir. 1997) (also noting that the “absence of such a suggestion to combine is dispositive in an obviousness determination”).

Evidence of a suggestion, teaching, or motivation to combine prior art references may flow, inter alia, from the references themselves, the knowledge of one of ordinary skill in the art, or from the nature of the problem to be solved. See In re Dembiczak, 175 F.3d 994, 1000, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Although a reference need not expressly teach that the disclosure contained therein should be combined with another, the showing of combinability, in whatever form, must nevertheless be “clear and particular.” Dembiczak, 175 F.3d at 999, 50 USPQ2d at 1617.

If there was no motivation or suggestion to combine selective teachings from multiple prior art references, one of ordinary skill in the art would not have viewed the present invention as obvious. See In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998); Gambro Lundia AB, 110 F.3d at 1579, 42 USPQ2d at 1383 (“The absence of such a suggestion to combine is dispositive in an obviousness determination.”).

Significantly, where there is not apparent disadvantage present in a particular prior art reference, then generally there can be no motivation to combine the teaching of another reference with the particular prior art reference. Winner Int'l Royalty Corp. v. Wang, No 98-1553 (Fed. Cir. January 27, 2000). The Office Action has failed to cite any apparent disadvantage of Nakai, which would prompt the combination of select teachings of Schloss therewith.

For at least this separate and independent basis, the rejections of claims 9-11 and 27-29 should be withdrawn.

CONCLUSION

Applicants respectfully submit that all claims are in proper condition for allowance, and respectfully request that the Examiner pass this case to issuance. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

No fee is believed to be due in connection with this Response to Non-Final Office Action. If, however, any fee is deemed to be payable, you are hereby authorized to charge any such fee to Hewlett-Packard Company's Deposit Account No. 08-2025.

Respectfully submitted,



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